Replacement Abstract:

Please cancel the Abstract found on page 25 and replace it with the following:

Implementations of a two-dimensional pyramid filter are disclosed including a two-dimensional pyramid filter architecture of an order 2N-1, where N is a positive integer greater than three. The two-dimensional pyramid filter architecture of order 2N-1 may include one-dimensional pyramid filters of order 2N-1, a first summer circuit; and a second summer circuit. The two dimensional pyramid filter architecture of order 2N-1 may produce, in operation on respective clock cycles, at least a pyramid filtered output signal corresponding to the summation by the first summer circuit of output signals produced by four one-dimensional pyramid filters of order 2N-1, and a pyramid filtered output signal corresponding to an output signal produced by summing signal sample matrices of order [2(N-1)-1] in the second summer circuit. The respective pyramid filtered output signals of the two dimensional pyramid filter architecture may be summed by the third summer circuit on respective clock cycles.